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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/090,068

03/01/2002

Torsten Grust

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EXAMINER

NGUYEN, CINDY

ART UNIT

PAPER NUMBER

2161

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DELIVERY MODE

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/090,068	Applicant(s) GRUST ET AL.	
	Examiner CINDY NGUYEN	Art Unit 2161	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 August 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3,4,14,16,17,24,26 and 28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 3, 4., 14, 16, 17, 24, 26 and 28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 08/27/08 has been entered.

Response to Arguments

Applicant's arguments have been considered but are moot in view of the new ground(s) of rejection.

Specification

The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required:

Claim 24 recites the limitation "media". There is insufficient antecedent basis for this limitation in the claim.

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Claim Rejections - 35 USC § 112

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The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1 and 14 are rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential structural cooperative relationships of elements, such omission amounting to a gap between the necessary structural connections. See MPEP § 2172.01. The omitted structural cooperative relationships are: There is not relationship of step d. Correction is required.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1-25, 27 and 28 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Regarding claim 14, “a system” is recited, however, “a system” would reasonably be interpreted be on of ordinary skill in the art as software per se. (see specification, paragraphs 0045). (See MPEP 2106).

Claims 16 and 17, full incorporating the deficiencies of their parent claim, are likewise rejected.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 3, 14, 16, 24, 26 and 28 are rejected under 35 U.S.C. 102(e) as being anticipated by Brandow et al. (US 6938041, hereafter Brandow).

Regarding claim 1, Brandow discloses: A method of managing a relational database comprising:

a. receiving queries in SQL, the queries comprising a plurality of query terms (i.e., the SQL statements received from the one or more clients, col. 7, lines 31-33, Brandow);

b. interpreting the queries by associating at least one declarative language function with the query terms by converting the SQL to an intermediate tree representation corresponding to the declarative language function (the SQL statements are passed to the parser 261 which converts the statements into a query tree-a binary tree data structure which represents the components of the query ... see col. 7, lines 35-40, Brandow);

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c. converting the queries represented by the at least one declarative language function to a plurality of JAVA statement (see col. 7, lines 61-65; col. 13, lines 36-45, Brandow);

executing the imperative language statements (see col. 15, lines 35-51, Brandow).

Regarding claim 14, all the limitations of these claims have been noted in the rejection of claim 1 above. In addition, Brandow discloses: converting, the query to at least one data structure that is interpreted by an interpreted language interpreter core to perform the queries (the SQL statements are passed to the parser 261 which converts the statements into a query tree-a binary tree data structure which represents the components of the query ... see col. 7, lines 35-40, Brandow).

Regarding claim 24, all the limitations of these claims have been noted in the rejection of claims 1 and 14 above. In addition, Brandow discloses: wherein the declarative language function is implemented in ML and the imperative language statements are JAVA statements (the SQL statements are passed to the parser 261 which converts the statements into a query tree-a binary tree data structure which represents the components of the query ... see col. 7, lines 35-40; col. 7, lines 61-65; col. 13, lines 36-45, Brandow).

Regarding claims 3, 16 and 26, all the limitations of these claims have been noted in the rejection of claims 1, 14 and 24 above, respectively. In addition, Brandow discloses: wherein the declarative language function is identified by a pointer to further

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code such that the declarative language function is treated as data within the plurality of imperative language statements (see col. 15, lines 60 to col. 16, lines 12, Brandow).

Regarding claim 28, all the limitations of this claim have been noted in the rejection of claim 24 above. In addition, Brandow disclose wherein the imperative language is chosen from the group consisting of C, C++, Java, Modula2, and Smalltalk (i.e., Java, C, C++, see col. 15, lines 51, col. 16, lines 14, and lines 55, Brandow).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 4 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brandow et al. (US 6938041, hereafter Brandow) in view of Simon Peyton Jones et al. "Bridging the gulf: a common intermediate language for ML and Haskell", Copyright 1998 ACM (hereafter Simon).

Regarding claims 4 and 17, all the limitations of these claims have been noted in the rejection of claim 1, and 14, above, respectively. However, Brandow didn't disclose: wherein the declarative language is chosen from the group consisting of ML, LISP, and

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HASKELL. On the other hand, Steele discloses: ML, LISP and HASKELL. On the other hand, Simon discloses: wherein the declarative language is chosen from the group consisting of ML, LISP, and HASKELL. On the other hand, Steele discloses: ML, LISP and HASKELL (see abstract, page 49). Thus, at the time invention was made, it would have been obvious to a person of ordinary skill in the art to include wherein the declarative language is chosen from the group consisting of ML, LISP, and HASKELL in the system of Brandow as taught by Simon. The motivation being to provide the ability to compile as good code as a more direct route turned out to be and identify two alternative language designs and explore the choices they embody.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cindy Nguyen whose telephone number is 571-272-4025. The examiner can normally be reached on 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Apu Mofiz can be reached on 571-272-4080. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Cindy Nguyen

/C. N./

Examiner, Art Unit 2161

/Apu M Mofiz/

Supervisory Patent Examiner, Art Unit 2161